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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,903	03/15/2001	Sheng Feng Chien	023925-00002	2925
32294	7590	11/01/2004	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			NGUYEN, STEVEN H D	
14TH FLOOR			ART UNIT	
8000 TOWERS CRESCENT			PAPER NUMBER	
TYSONS CORNER, VA 22182			2665	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,903

Applicant(s)

CHIEN, SHENG FENG

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4, 6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 6, 12-13, 17, 23-24 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Belser (USP 6151324).

Regarding claims 1, 12 and 23, Belser discloses (Figs 1-13 and col. 1, lines 60 to col. 11, lines 26) a method and system for encapsulating and decapsulating information into a data packet being transmitted through a plurality of switches (Fig 3, Ref 15-16 and 18) comprising the steps of receiving a data packet in a first switch for transmission to a second switch (Fig 3B, Ref 15 receiving a packet from a station 14 for transmitting via the switches to the station 19); encapsulating information into a field of said data packet so that said information, when encapsulated into said data packet, does not increase the size of said data packet; transmitting said data packet having said information encapsulated in said data packet to said second switch (Fig 3B, the header field of the packet DA-SA is replaced with Virtual Path information to created a modified packet fro transmitting to the egress switch 18); receiving said data packet having said information encapsulated in said data packet in said second switch; and decapsulating said information encapsulated in said data packet to determine said information

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encapsulated in said data packet (Fig 3B, the egress switch replacing the virtual path with the DA and SA by extracting the virtual path in order to determine the replacing information).

Regarding claims 2, 6, 13, 17, 24 and 28, Belser discloses step of encapsulating information into a field of said data packet further comprises the step of using an encode codebook to encapsulate said information into a field of said data packet and step of decapsulating said information encapsulated in said data packet comprises the step of using a decoding code book to decapsulate said information encapsulated in said data packet (col. 4, line 55 to col. 5, lines 8, look up table is used to perform replacing).

3. Claims 1, 12 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Vanden Heuvel (USP 5751723).

Regarding claims 1, 12 and 23, Vanden Heuvel discloses (Figs 1-3 and col. 1, line 10 to col. 5, lines 46) a system and method for encapsulating and decapsulating information into a data packet being transmitted through a plurality of switches (Fig 1)) comprising the steps of receiving a data packet in a first switch for transmission to a second switch; encapsulating information into a field of said data packet so that said information, when encapsulated into said data packet, does not increase the size of said data packet; transmitting said data packet having said information encapsulated in said data packet to said second switch (Fig 2, receiving a message packet and encapsulating the background information into the unused bits of the packet to create a enriched packet for transmitting to the next node); receiving said data packet having said information encapsulated in said data packet in said second switch; and decapsulating said information encapsulated in said data packet to determine said information encapsulated in said data packet (Fig 3, extracting the encapsulating background data from the enriched packet).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 8-9, 11, 19-20, 22, 30-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belser (USP 6151324).

Regarding claims 8-9, 19-20 and 30-31, Belser discloses a packet includes a FCS. Therefore, it would have been obvious to one of ordinary skill in the art to implement the step of determining if an error occurred in the transmission of said data packet by performing error checking to determine if the received packet contains any error. The motivation would have been to reduce the data loss.

Regarding claim 11, 22 and 33, Belser discloses a lookup table for mapping the overlaying data in the data packet in order to recover the original data in order to route the data packet to destination node. Therefore, it would have been obvious to one of ordinary skill in the

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art to implement a decapsulating module determines an error occurred in the transmission of said data packet if said information encapsulated in said data packet cannot be identified in a decode code book by declaring the transmission data packet is invalid because the switch does not know where to route the modified packet if the lookup table does not contain Virtual path of the packet and remove the packet from network. The motivation would have been to improve the perform of the network.

7. Claims 3-5, 7-10, 14-16, 18-21, 25-27 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanden Heuvel in view of Figueira (USP 6609226).

Regarding claims 3-5, 7, 14-16, 18, 25-27 and 29, Vanden Heuvel fails to disclose said encapsulating module encapsulates said information into a Frame Check Sequence field of said data packet by performing an XOR function on said Frame Check Sequence of said data packet and said information, wherein said Frame Check Sequence field of said data packet is XORed with said information and decapsulating module decapsulates said information encapsulated in said data packet from a Frame Check Sequence field of said data packet. However, Figueira discloses a method and system for encapsulating the information into a FCS field of data packet using xor function before transmitting onto the network and decapsulating the encapsulating information in order to obtain the original value of the FCS field (Figs 9-10, the CRCV1 is encapsulated into FCS in Fig 9 and the encapsulated information is extracted to obtain the original FCS field).

Since, Vanden Heuvel discloses a packet includes a FCS. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for encapsulating information into FCS field or decapsulating the

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information from FCS field as disclosed Figueira's system and method into Vanden Heuvel's method and system in order to provide a new CRC for a new modified packet.

Regarding claims 8-10, 19-21 and 30-32, Vanden Heuvel discloses a packet includes a FCS. Therefore, it would have been obvious to one of ordinary skill in the art to implement the step of determining if an error occurred in the transmission of said data packet by performing error checking to determine if the received packet is valid or not; if the packet error, then the background information is error because of using CRC to determine if packet is valid or not is well known and expected in the art. The motivation would have been to reduce the data loss.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Meares (USP 6157651) discloses a method and system for encapsulating information into a data packet without modifying the size of the data packet.

Normile (USP 5541995) discloses a method and system for encapsulating information into a data packet without modifying the size of the data packet by using XOR function.

Desai (USP 6597695) a method and system for encapsulating information into a data packet without modifying the size of the data packet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
10/26/04